Fig. 1

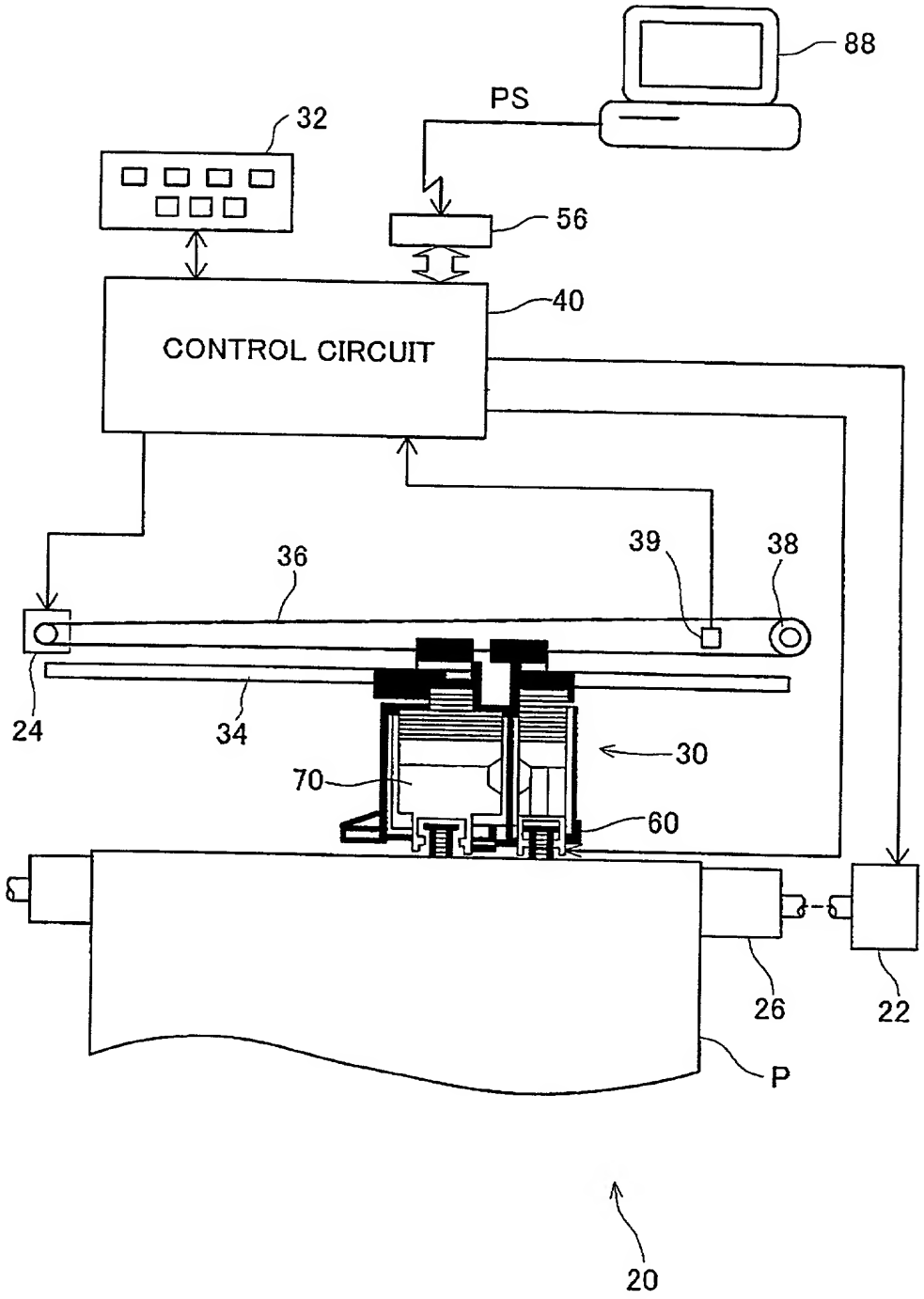


Fig.2

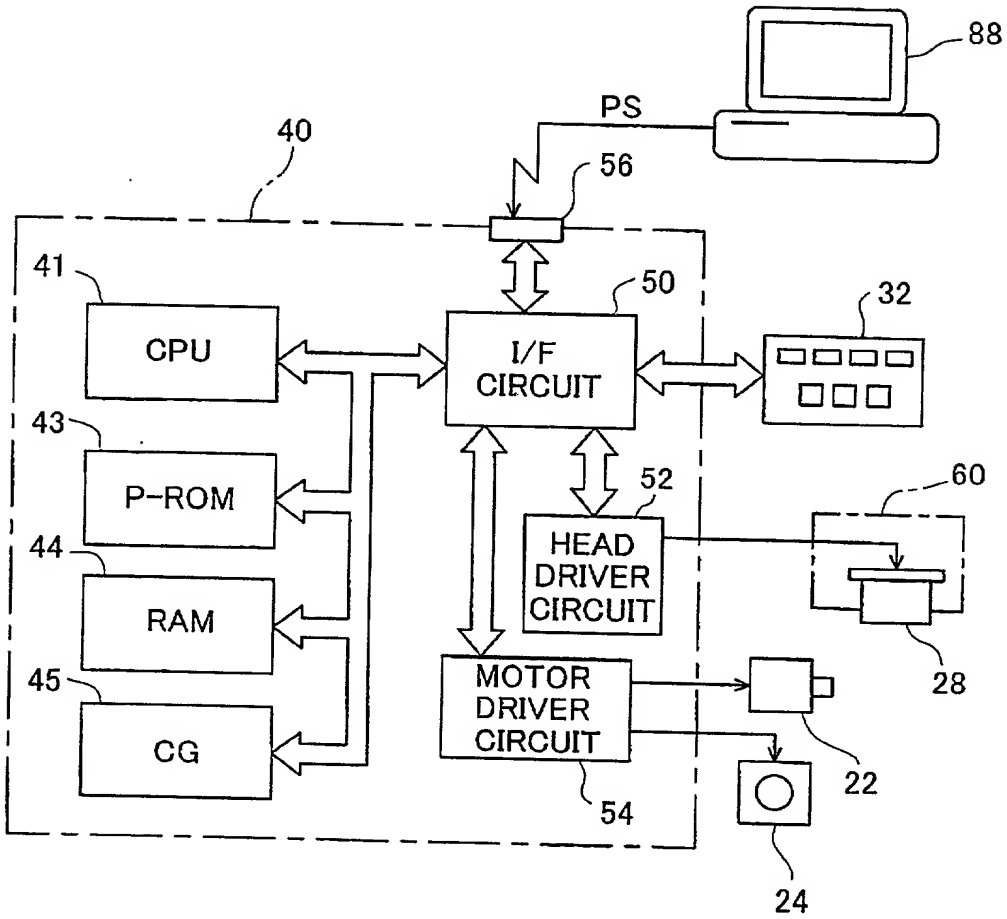

88
PS
40
56
41
50
32
CPU
I/F
CIRCUIT
43
P-ROM
52
60
HEAD
DRIVER
CIRCUIT
44
RAM
45
CG
MOTOR
DRIVER
CIRCUIT
28
22
54
24

Fig.3

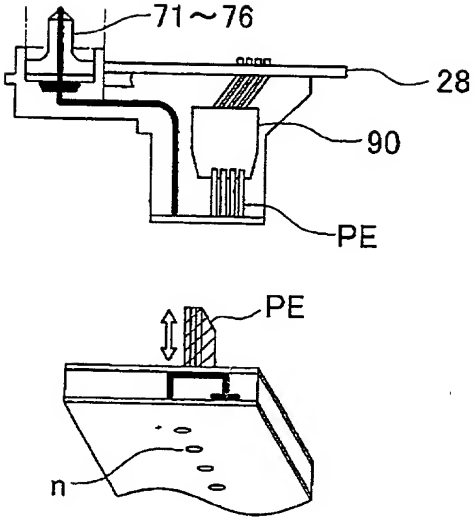



Fig.4A

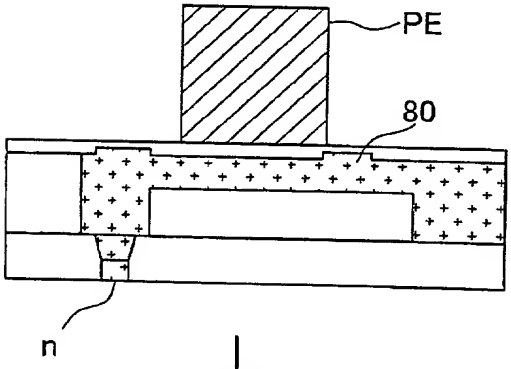



Fig.4B

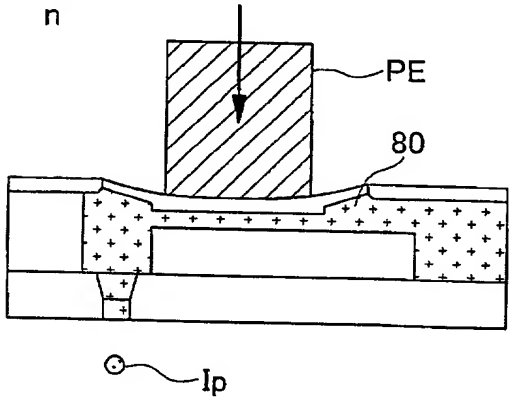


*Fig.5*

FIRST EMBODIMENT

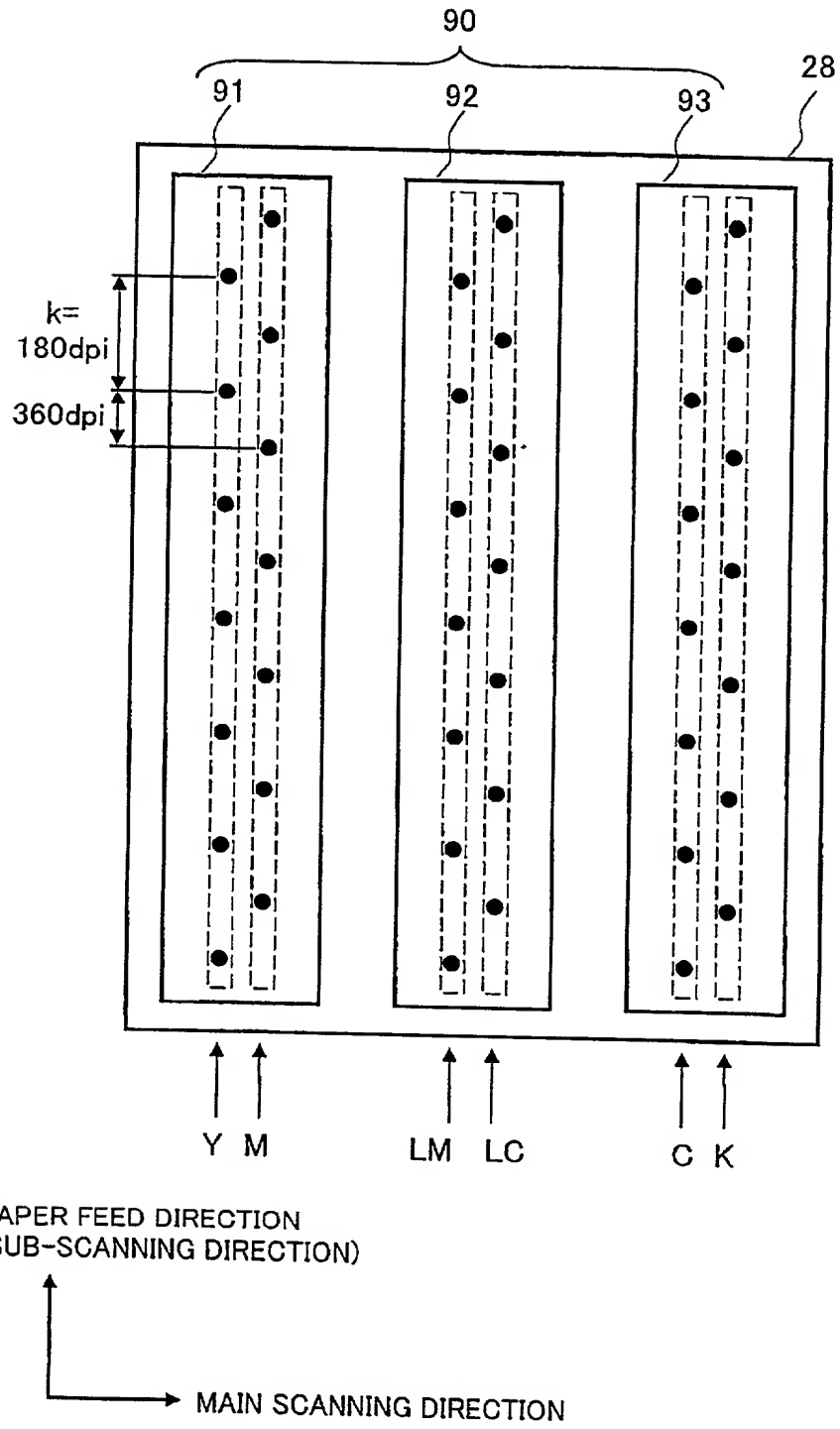


Fig.6

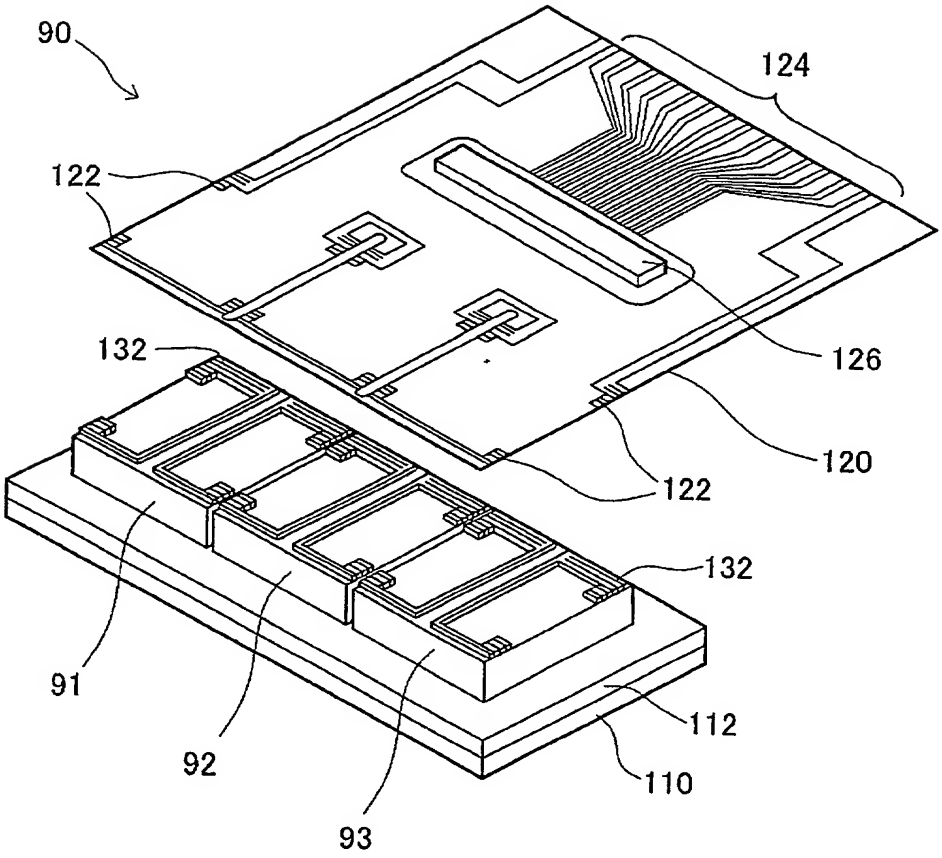


Fig.7

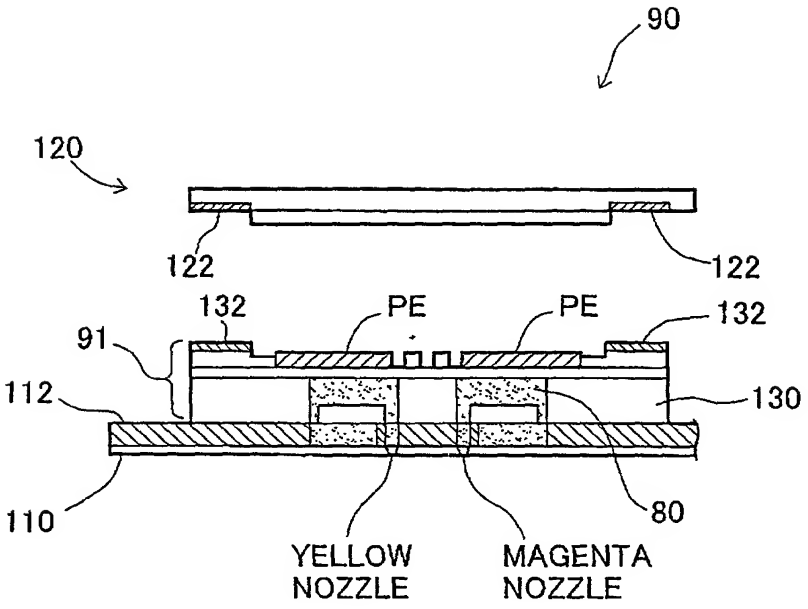

90
120
122
122
132
PE
PE
132
91
112
130
110
80
YELLOW
NOZZLE
MAGENTA
NOZZLE

*Fig.8*

INK PASSAGE ARRANGEMENT OF FIRST EMBODIMENT

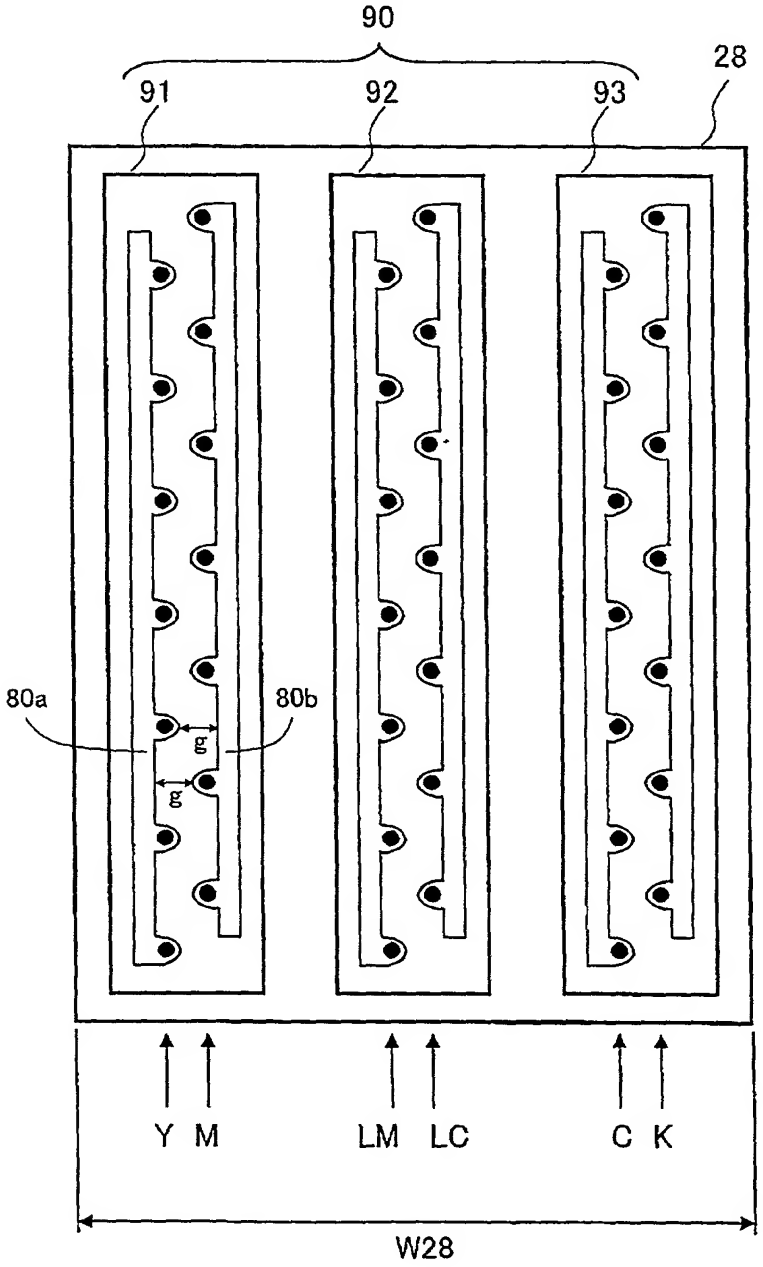
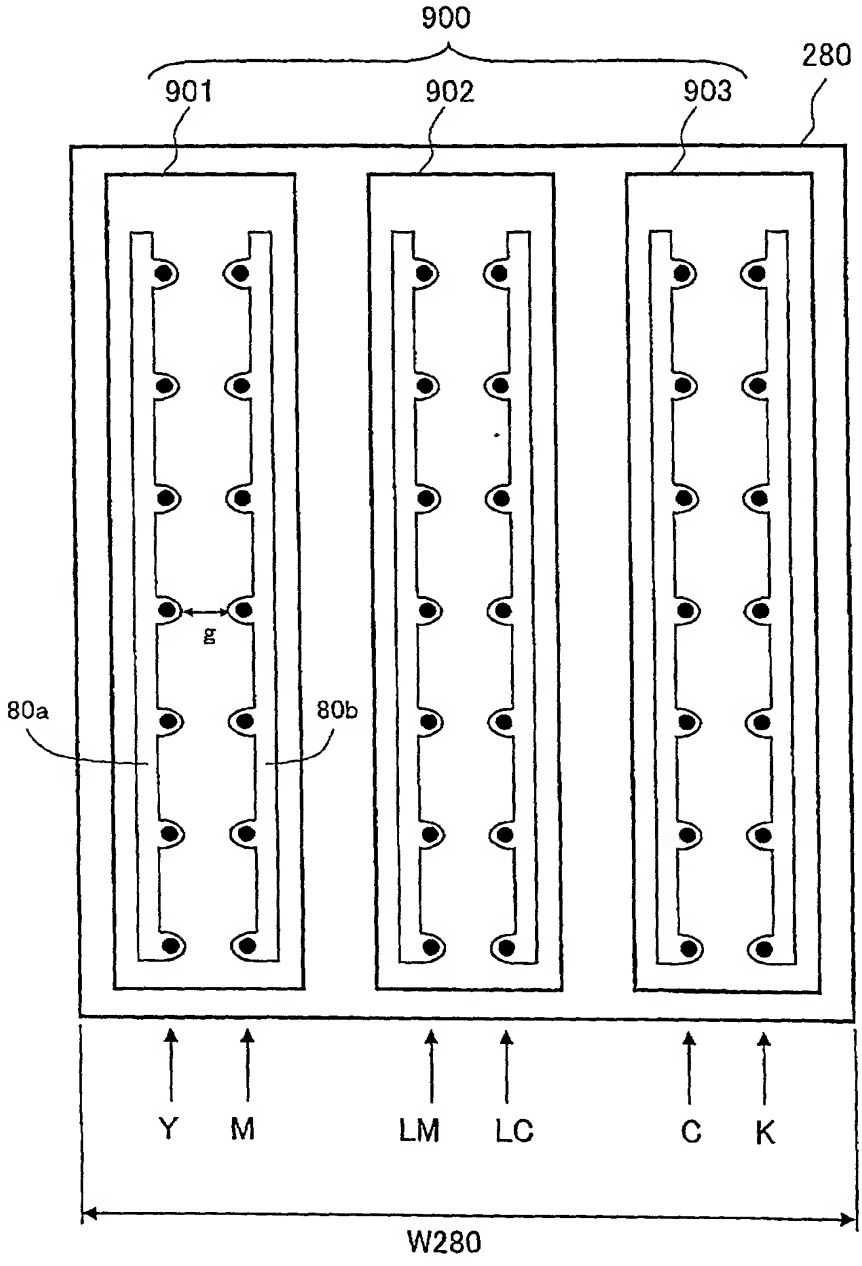


*Fig.9*

INK PASSAGE ARRANGEMENT OF COMPARATIVE EXAMPLE




( W28 < W280 )

Fig. 10

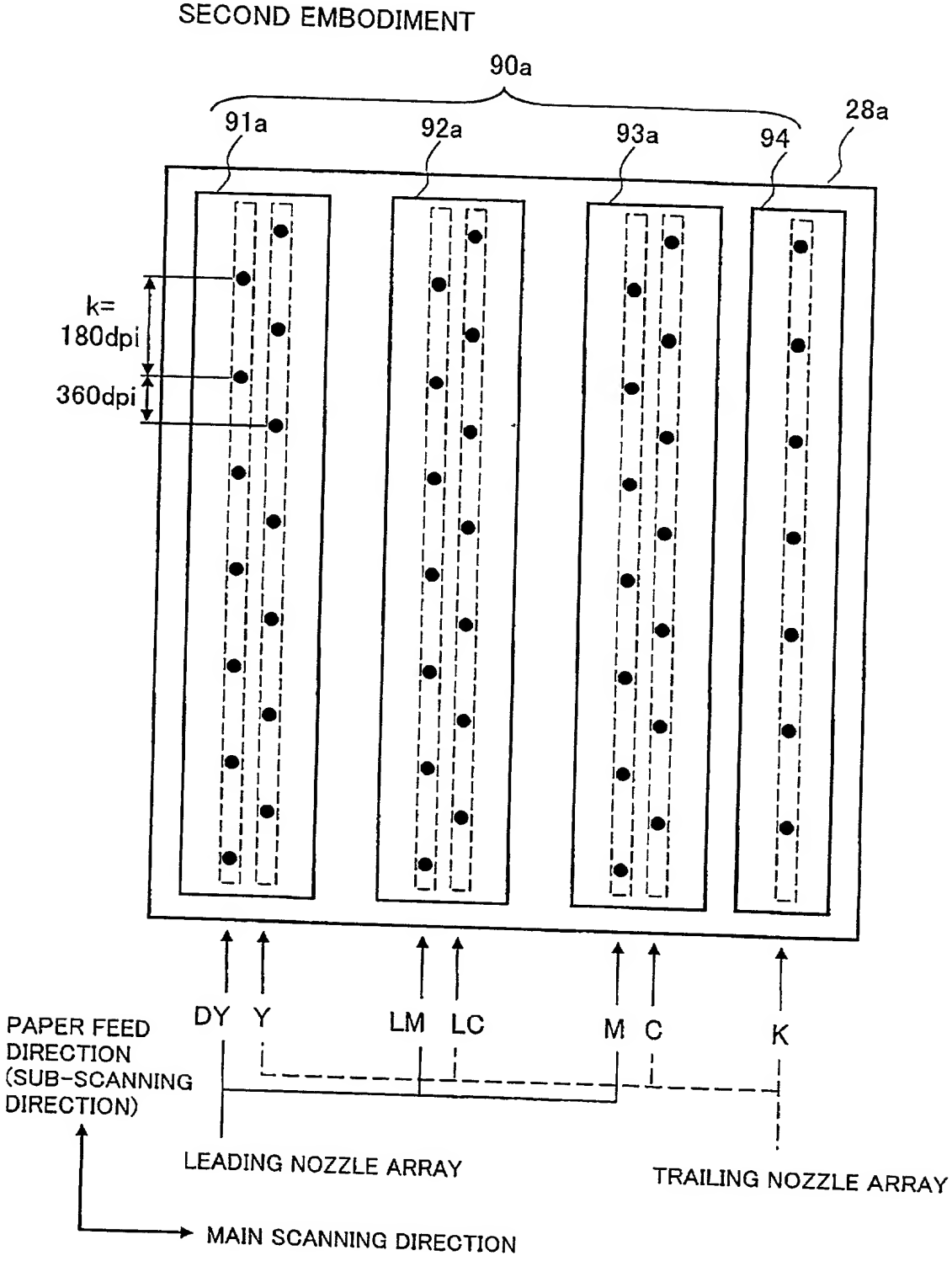

SECOND EMBODIMENT
90a
91a
92a
93a
94
28a
k=
180dpi
360dpi
DY
Y
LM
LC
M
C
K
PAPER FEED
DIRECTION
(SUB-SCANNING
DIRECTION)
LEADING NOZZLE ARRAY
TRAILING NOZZLE ARRAY
MAIN SCANNING DIRECTION

Fig.11A

ACTUAL NOZZLE ARRAYS

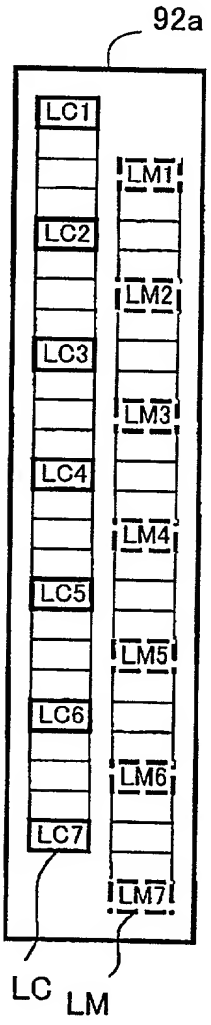



Fig.11B

EQUIVALENT NOZZLE ARRAY

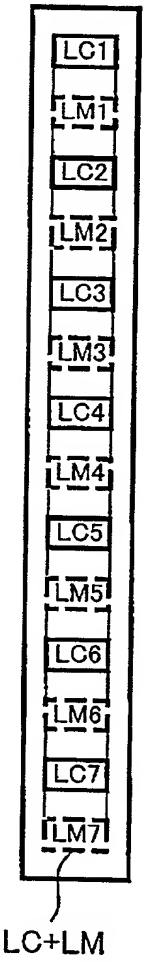


*Fig. 12*

BI-DIRECTIONAL PRINTING WITH PRINT HEAD
OF SECOND EMBODIMENT

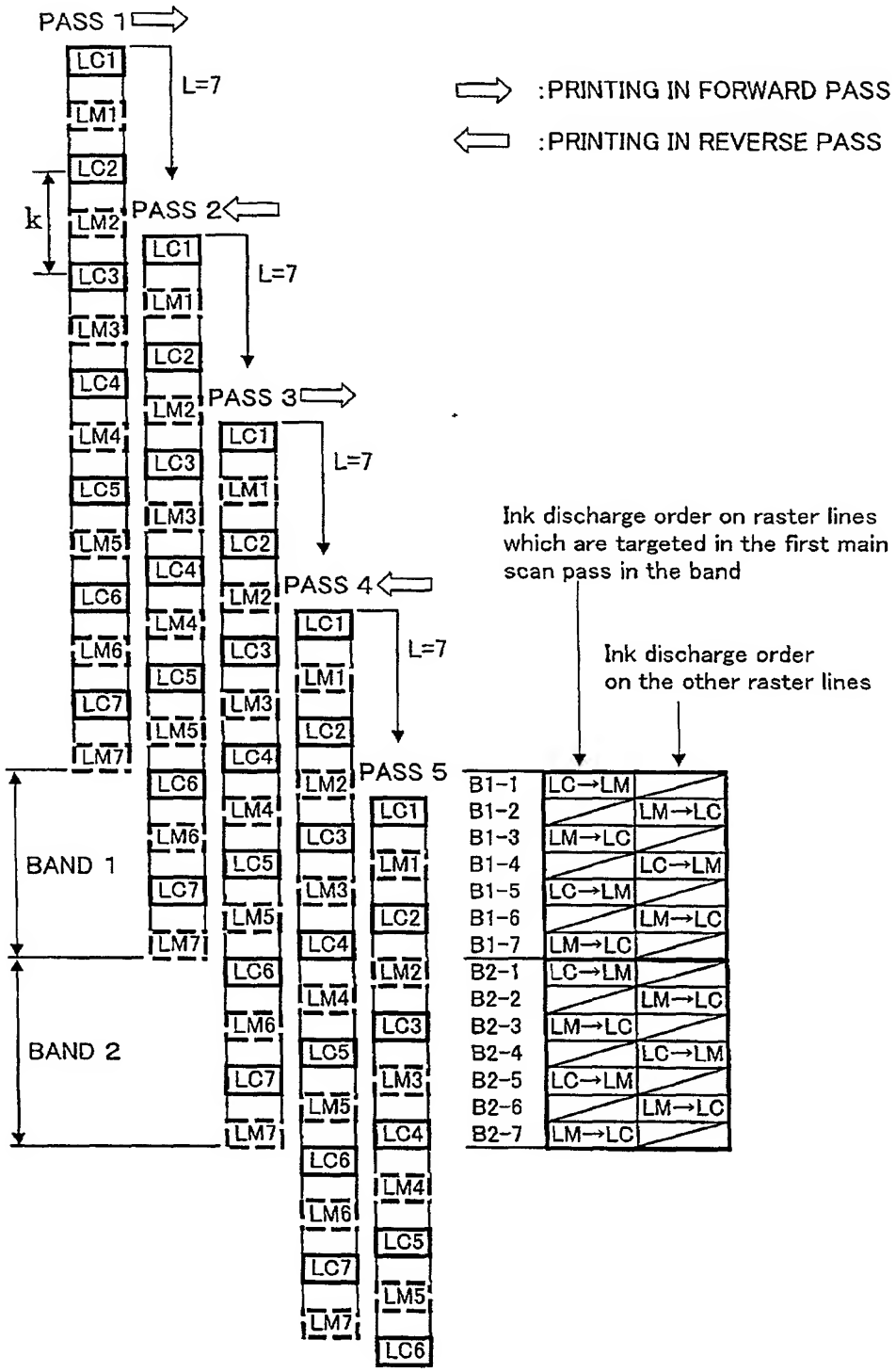


Fig. 13

BI-DIRECTIONAL PRINTING WITH PRINT HEAD
OF COMPARATIVE EXAMPLE

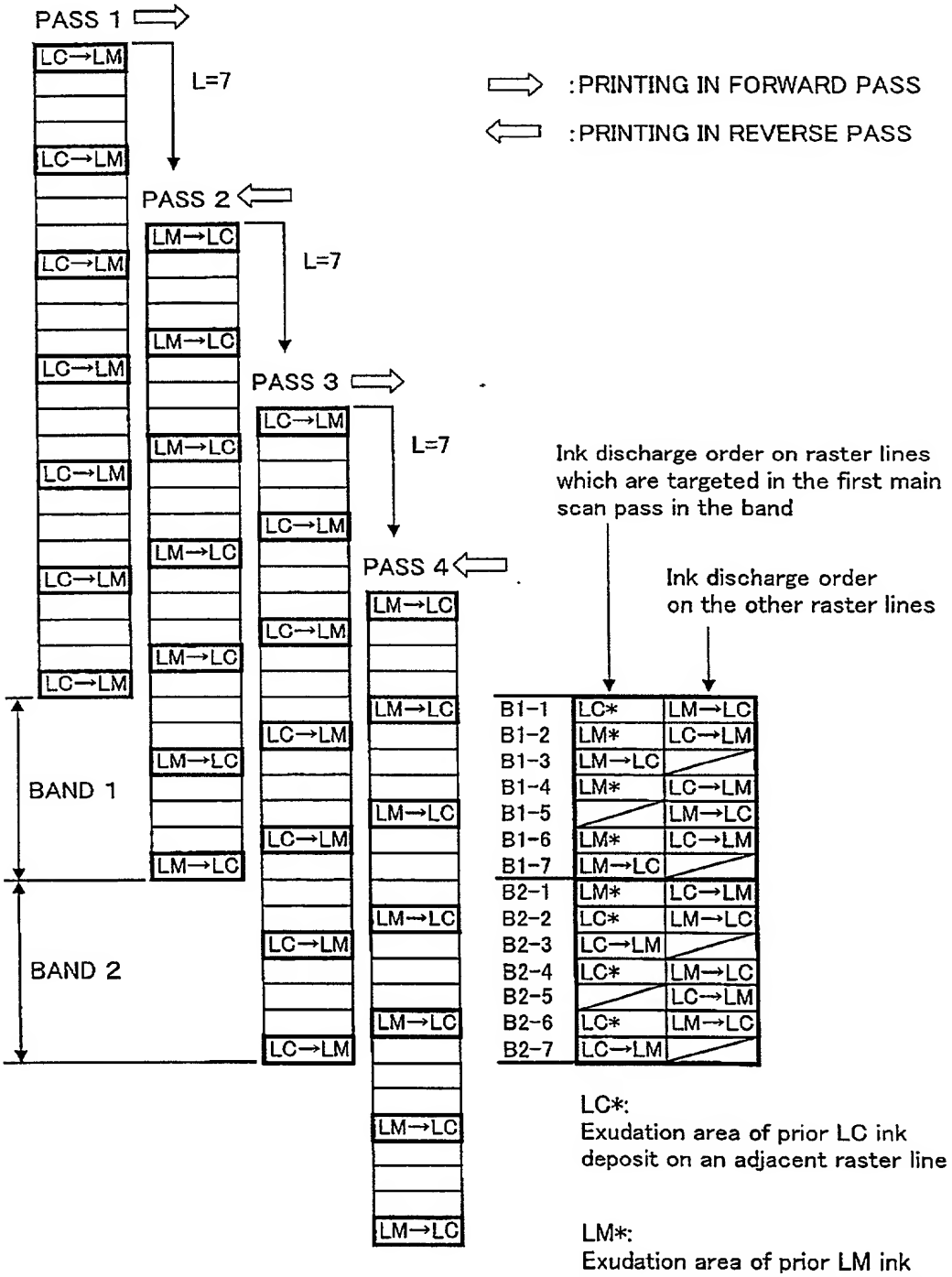


*Fig. 14*

THIRD EMBODIMENT

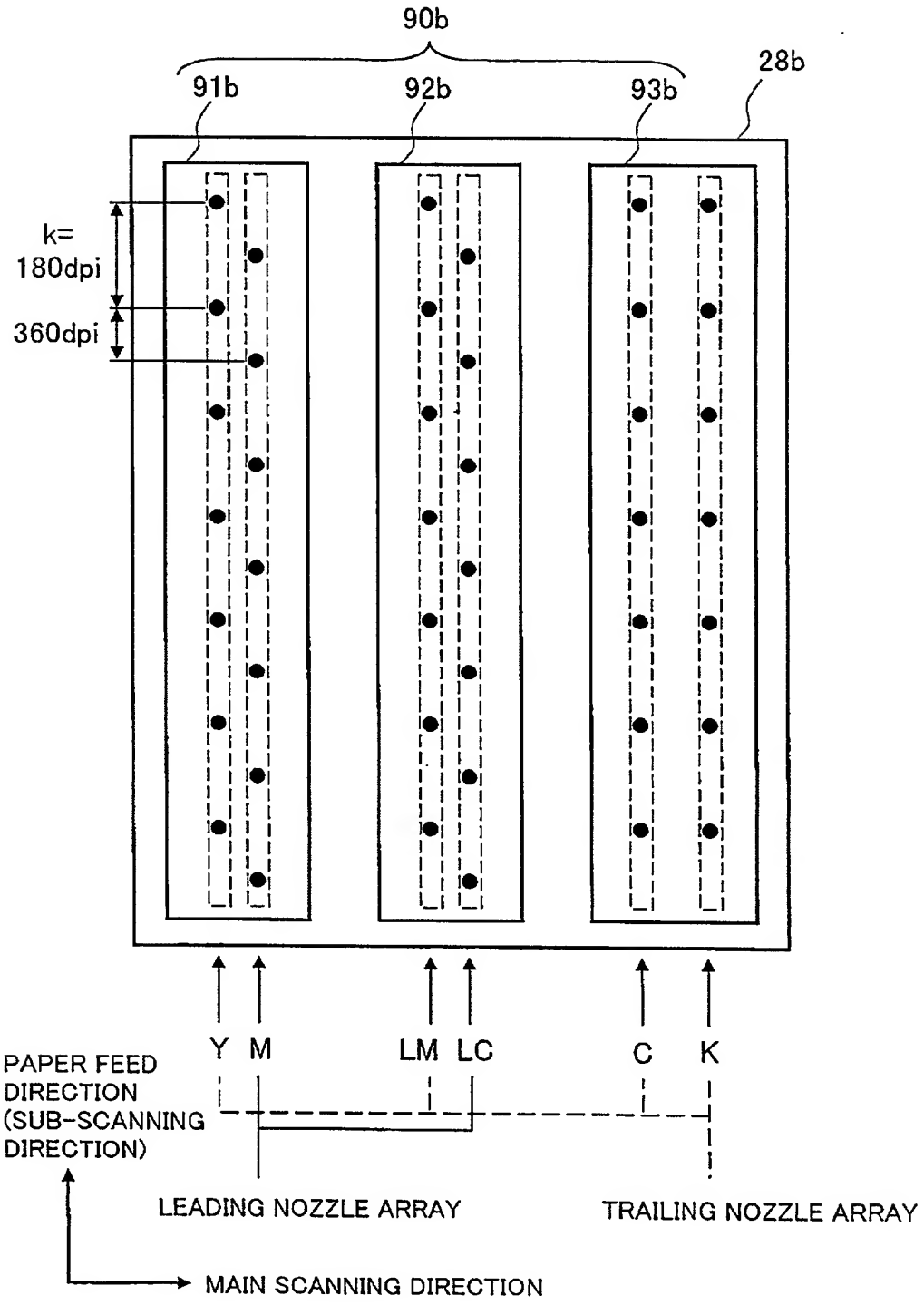


*Fig. 15*

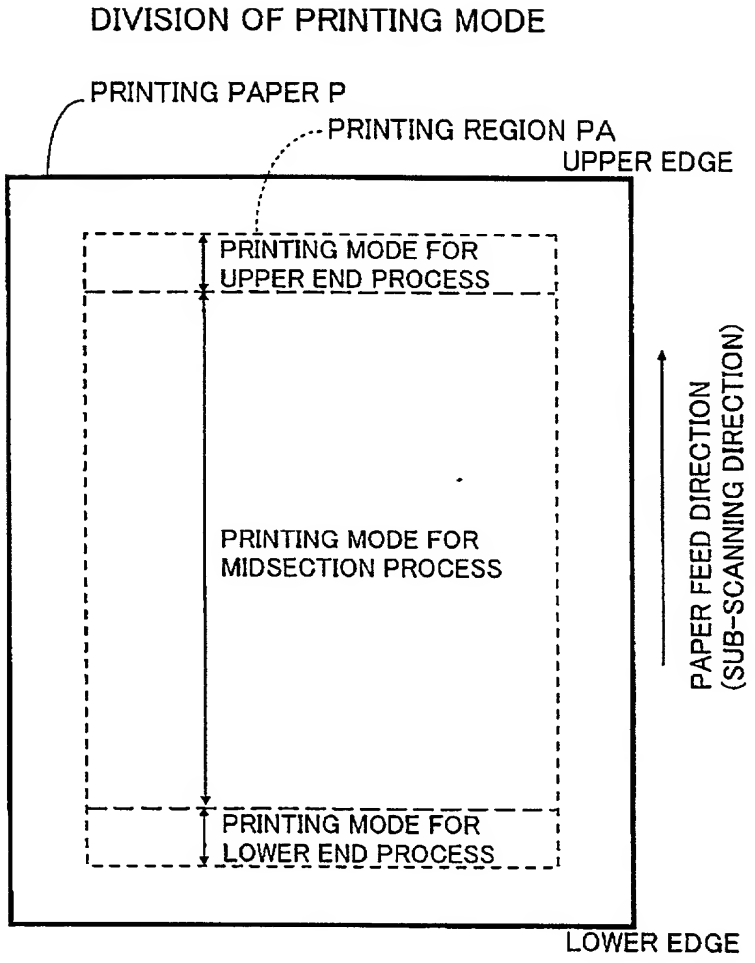

DIVISION OF PRINTING MODE
PRINTING PAPER P
PRINTING REGION PA
UPPER EDGE
PRINTING MODE FOR UPPER END PROCESS
PRINTING MODE FOR MIDSECTION PROCESS
PRINTING MODE FOR LOWER END PROCESS
PAPER FEED DIRECTION (SUB-SCANNING DIRECTION)
LOWER EDGE

*Fig. 16*

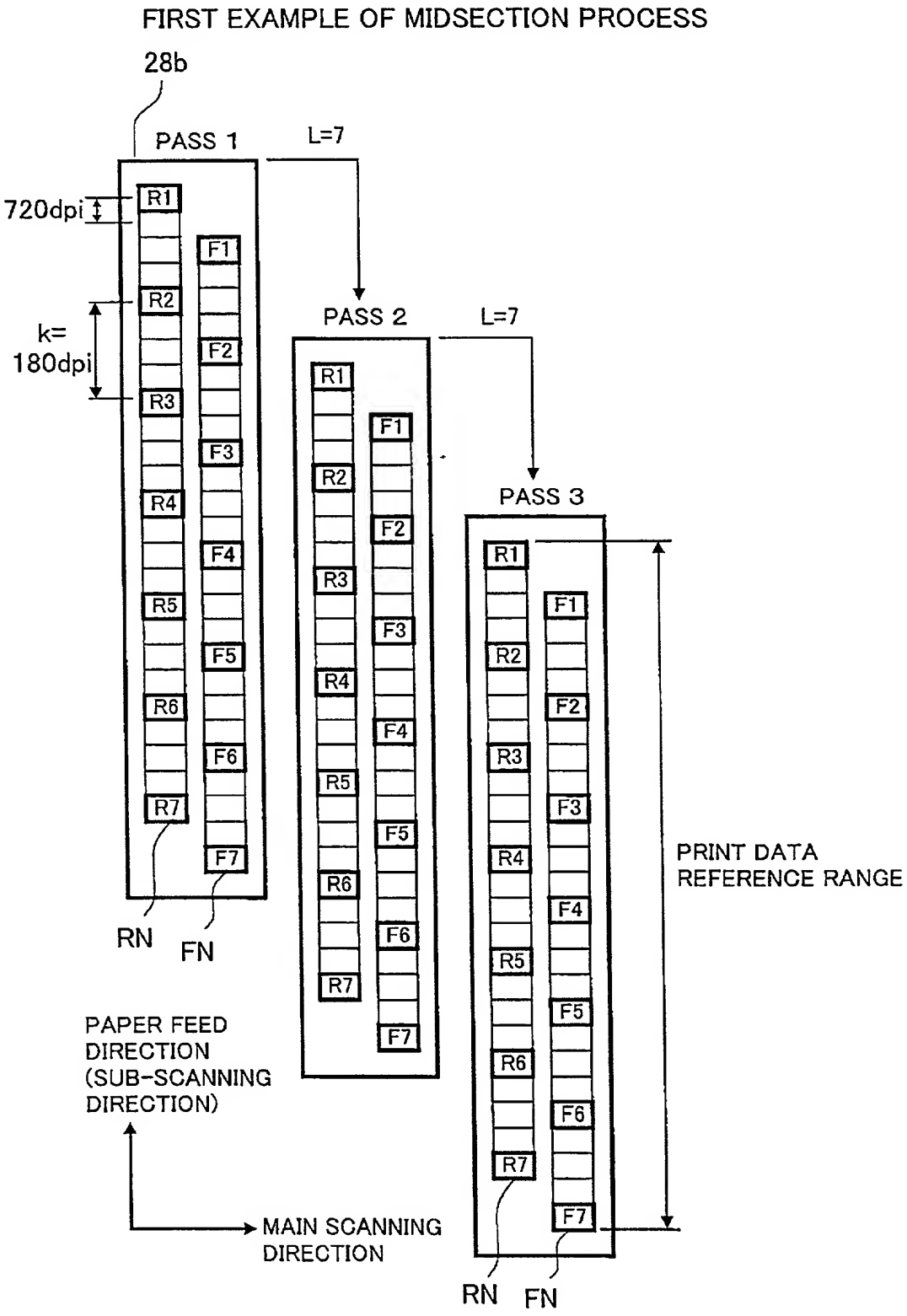

FIRST EXAMPLE OF MIDSECTION PROCESS
28b
PASS 1
L=7
720dpi
k=
180dpi
R1
R2
R3
R4
R5
R6
R7
F1
F2
F3
F4
F5
F6
F7
RN
FN
PASS 2
L=7
PASS 3
PRINT DATA
REFERENCE RANGE
PAPER FEED
DIRECTION
(SUB-SCANNING
DIRECTION)
MAIN SCANNING
DIRECTION

Fig.17A

Fig.17B

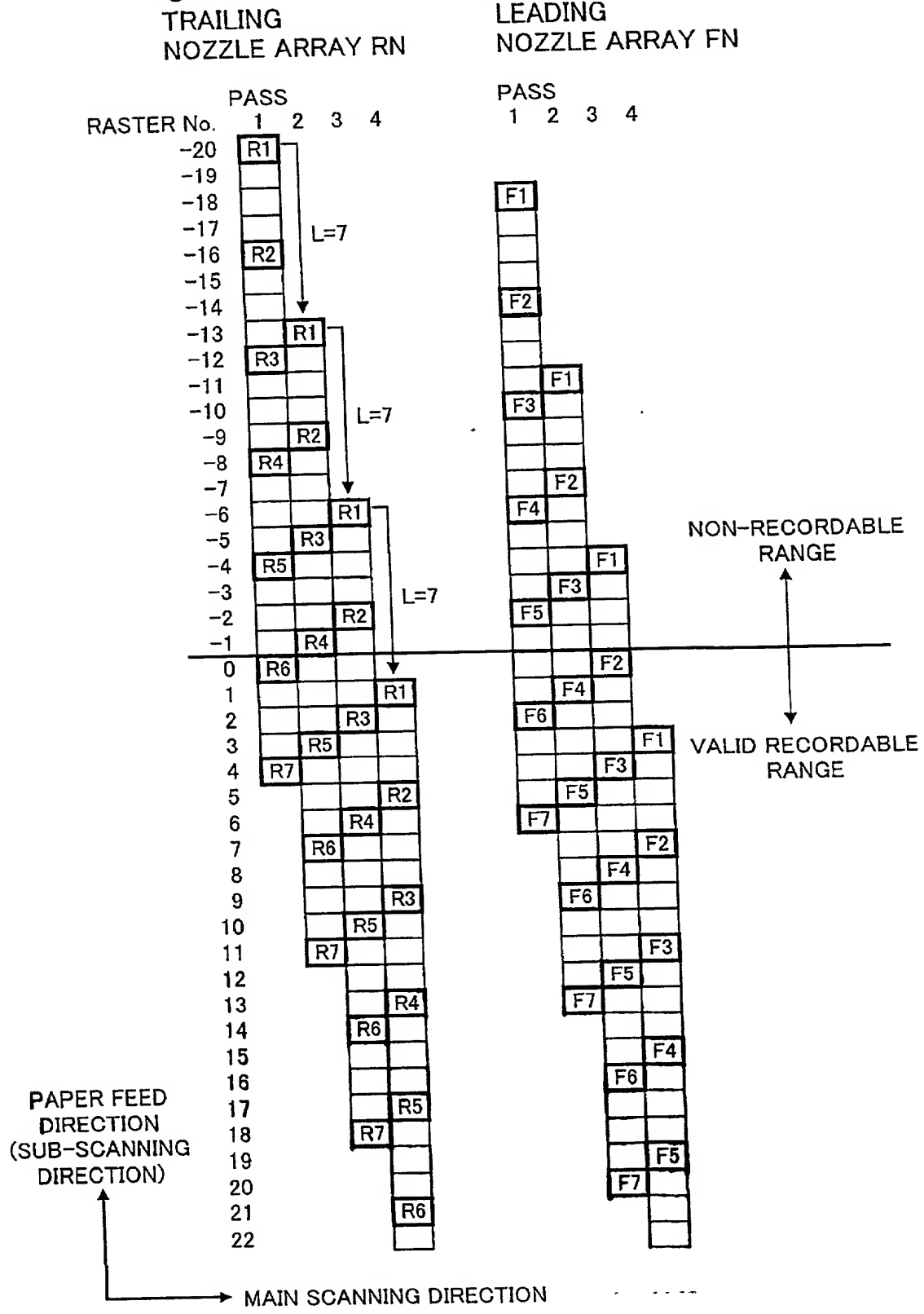
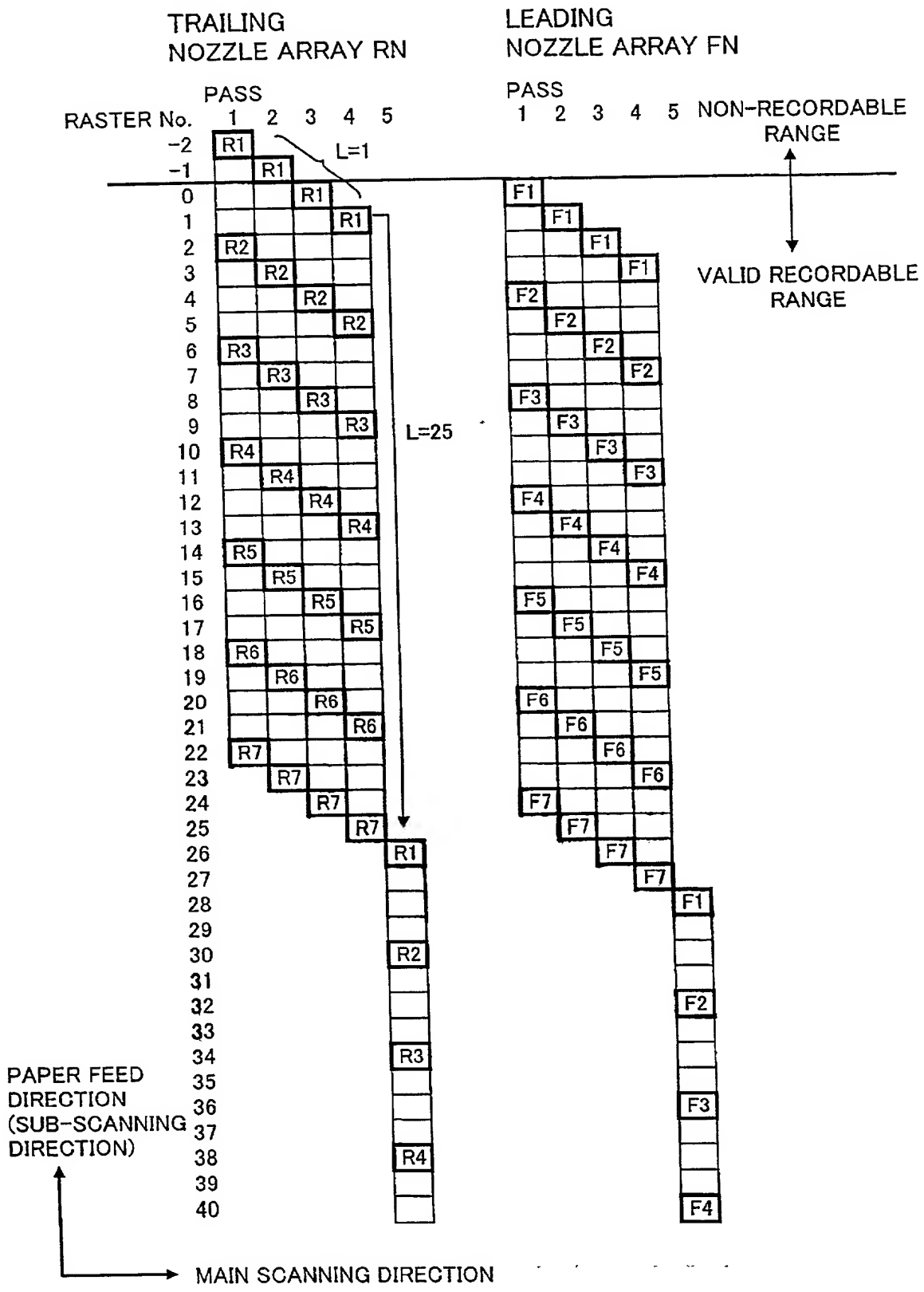


Fig. 18A

Fig. 18B



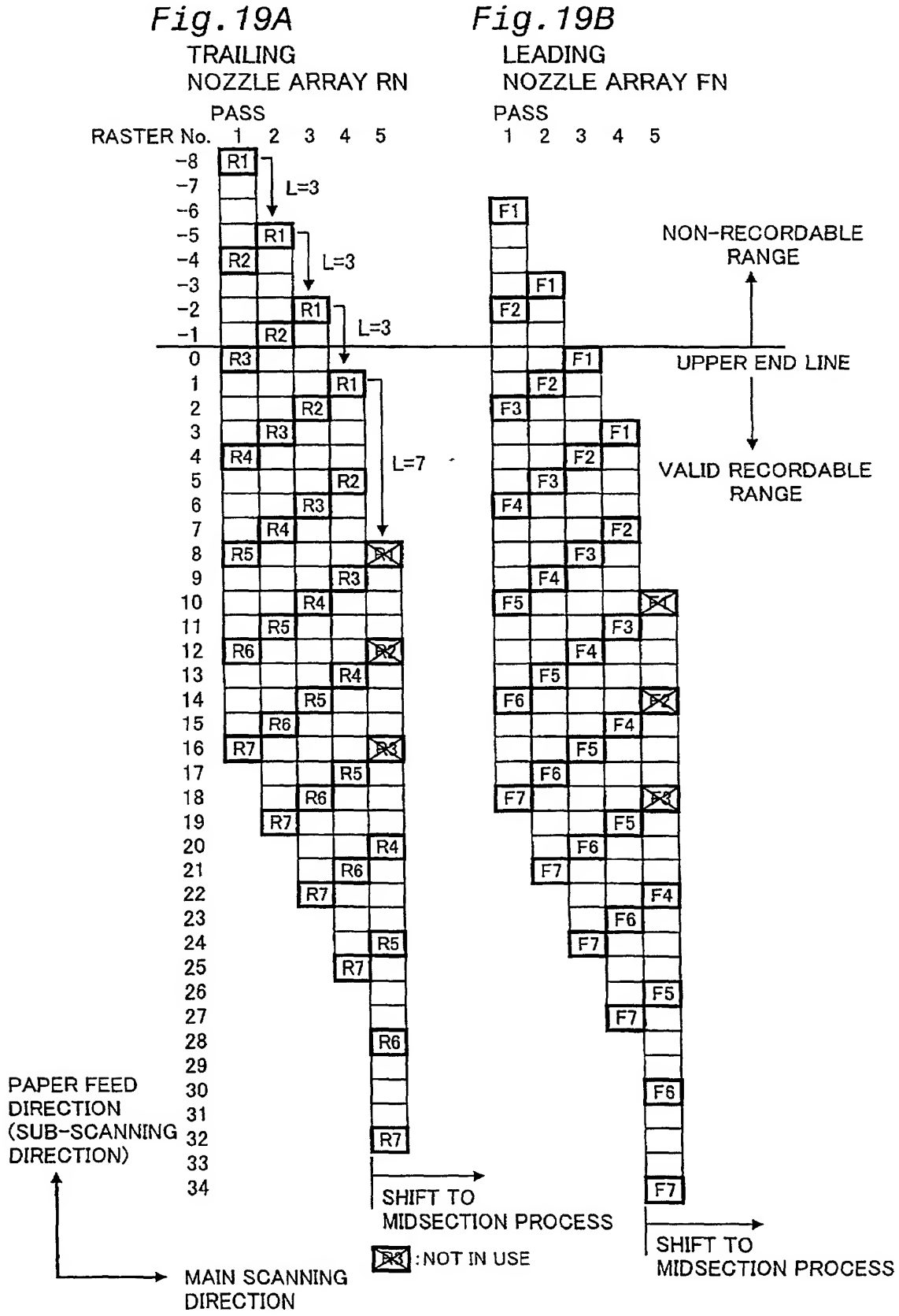


Fig.19A
TRAILING
NOZZLE ARRAY RN
PASS
RASTER No. 1 2 3 4 5
L=3
L=3
L=3
L=7
Fig.19B
LEADING
NOZZLE ARRAY FN
PASS
1 2 3 4 5
NON-RECORDABLE RANGE
UPPER END LINE
VALID RECORDABLE RANGE
PAPER FEED DIRECTION (SUB-SCANNING DIRECTION)
MAIN SCANNING DIRECTION
SHIFT TO MIDSECTION PROCESS
: NOT IN USE
SHIFT TO MIDSECTION PROCESS

Fig.20A

Fig.20B